HW1Code – Ruth Steinberg

1. **AddTwo.java:**

```
public class AddTwo {

        public static void main(String[] args) {

                //gets 2 numbers from the command-line and define them as a variable of type int

                int num1 = Integer.parseInt(args[0]);

                int num2 = Integer.parseInt(args[1]);

                // define a new variable "sum" that represents the sum of num1 and num2

                int sum = num1+num2;

                // print

                System.out.println(" " + num1 + " + " + num2 + " = " + sum);

        }

}
```

2. **Coins.java:**

```
public class Coins {
        public static void main(String[] args) {
            //get number of cents from the command-line and define him as a variable of type int
            int sumCents = Integer.parseInt(args[0]);
            // calculate the amount of quarters
            int quarters = sumCents / 25;
            // calculate the remaining cents
            int cents = sumCents - (quarters*25);
            // print
            System.out.println("Use " + quarters + " quarters and " + cents + " cents");
            }
}
```

3. **LinearEq.java:**

```
public class LinearEq {
    public static void main(String[] args){
        //get 3 numbers from the command-line and define them as a variable of type double
        double a = Double.parseDouble(args[0]);
        double b = Double.parseDouble(args[1]);
        double c = Double.parseDouble(args[2]);
        // calculate x: a*x+b=c > a*x=c-d > x=(c-d)/a.
        double x = (c-b)/a;
        // print
        System.out.println(a + " * x + " + b + " = " + c + "\n" + "x = " + x);
    }
}
```

4. **Triangle.java:**

```
public class Triangle {

   public static void main(String[] args) {

      //gets 3 numbers from the command-line and define them as a variable of type int

      int a = Integer.parseInt(args[0]);

      int b = Integer.parseInt(args[1]);

      int c = Integer.parseInt(args[2]);

      // define a boolean variable that represent the answaer (if the 3 numbers can form triangle)

      // check if any two sides is greater than the length of the remaining side

      boolean answer = (((a+b)>c) && ((b+c)>a) && ((a+c)>b));

      // print the 3 numbers and the answer

      System.out.println(a + ", " + b + ", " + c + ": " + answer);

   }

}
```

5. **Gen3:**

```
public class GenThree {
    public static void main(String[] args) {
        // get 2 numbers from the command-line that represents the min and the max of the range
        int start = Integer.parseInt (args[0]);
        int end = Integer.parseInt (args[1])-1;
        // create 3 varieble from type int, that any varieble is random number between arg[0] and arg[1]
        int a = (int)((Math.random()*(end-start+1)))+start;
        int b = (int)((Math.random()*(end-start+1)))+start;
        int c = (int)((Math.random()*(end-start+1)))+start;
        //  create new varieble that represents the smallest number from a, b.
        int min = Math.min(a, b);
        // create new varieble (finel min) that represents the smallest number from min, c.
        int fMin = Math.min(min, c);
        // print
        System.out.println (a);
        System.out.println (b);
        System.out.println (c);
        System.out.println ("The minimul generated number was: " + fMin);
    }
}
```